

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A charger comprising:
an electrode having a plurality of ~~protrusions~~ charging needles and which is a sheet-shaped electric conductor having a first plane including a straight line in an axial direction of an image carrier giving a predetermined potential to an image carrier; and
[[a]] an electrode cleaning mechanism contacting tip ends of the charging needles, and including a sheet section having a second plane arranged perpendicularly to the first plane of the electrode, and a holding member for holding the sheet section along an axial direction of an image carrier ~~the electrode, and removing deposits electrostatically deposited on the electrode; and~~
~~a moving mechanism which moves the cleaning mechanism along the electrode.~~
2. (Currently Amended) The charger according to claim 1, wherein
the sheet section changes in shape based on predetermined stress ~~the cleaning mechanism includes a cleaning sheet whose shape is changed by a provided predetermined stress.~~
3. (Currently Amended) The charger according to claim 2, wherein
the ~~cleaning sheet is~~ sheet section comprises a film-like elastic sheet including a material selected from the group consisting of polyester, polyimide, and polyamide ~~made of polyester, polyimide, polyamide or the like.~~
4. (Currently Amended) The charger according to claim 2, wherein the ~~cleaning sheet~~ sheet section has a thickness of 10 to 100 μm .
5. (Currently Amended) The charger according to claim 2, wherein the ~~cleaning sheet~~ sheet section has a thickness of 25 to 75 μm .
6. (Currently Amended) The charger according to claim 2, wherein an encroaching amount of the ~~cleaning sheet~~ sheet section ~~and on~~ the electrode is 0.1 to 1.5 mm.

7. (Currently Amended) The charger according to claim 2, wherein an abrasive is applied to a surface of the ~~cleaning sheet~~ sheet section.
8. (Currently Amended) The charger according to claim 2, further comprising a holding plate capable of retaining the deposits removed from the electrode by the electrode cleaning mechanism.
9. (Canceled)
10. (Currently Amended) The charger according to claim 9 1, wherein the second plane of the sheet ~~portion~~ section is vertical to the first plane, and deforms within a range of -90° to 90° with respect to a virtual plane which includes a virtual line vertical to an axis of the image carrier.
11. (Currently Amended) An image forming apparatus comprising:
an image carrier which holds a latent image and a developer image;
a charger including an electrode, ~~[[a]]~~ an electrode cleaning mechanism and a moving mechanism,
the electrode having a plurality of ~~protrusions~~ charging needles and which is a sheet-shaped electric conductor having a first plane including a straight line in an axial direction of an image carrier giving a predetermined potential to an image carrier,
the electrode cleaning mechanism contacting tip ends of the charging needles, and including a sheet section having a second plane arranged perpendicularly to the first plane of the electrode, and a holding member for holding the sheet section along an axial direction of an image carrier, ~~the electrode and removing deposits electrostatically deposited on the electrode,~~
the moving mechanism moving the electrode cleaning mechanism along the electrode;
a development device which supplies a developer to the image carrier to which the predetermined potential is supplied by the charger; and
a transfer device which transfers the developer image formed on the image carrier onto an output medium.
12. (Original) The image forming apparatus according to claim 11, wherein

the moving mechanism comprises a driving means, and operates the driving means when the number of output media becomes a predetermined number or more.

13. (Original) The image forming apparatus according to claim 12, wherein the driving means is not operated while an image is being formed.

14. (Original) The image forming apparatus according to claim 11, wherein the moving mechanism comprises the driving means, and operates the driving means with an instruction from a control panel.

15. (Currently Amended) The image forming apparatus according to claim 11, wherein

the sheet section changes in shape based on predetermined stress ~~the cleaning mechanism includes a cleaning sheet whose shape is changed by a provided predetermined stress.~~

16. (Currently Amended) The image forming apparatus according to claim 12, wherein

~~the cleaning sheet~~ sheet section is a film-like elastic sheet including a material selected from the group consisting of polyester, polyimide, and polyamide ~~made of polyester, polyimide, polyamide or the like.~~

17. (Currently Amended) The image forming apparatus according to claim 12, wherein

an abrasive is applied to a surface of the ~~cleaning sheet~~ sheet section.

18. (Currently Amended) The image forming apparatus according to claim 12, further comprising a holding plate capable of retaining the deposits removed from the electrode by the electrode cleaning mechanism.

19. (New) A charger comprising:

an electrode comprising a plurality of charging needles and providing a predetermined charge to an image carrier;

an electrode cleaning mechanism comprising a sheet section contacting tip ends of the charging needles; and

a moving mechanism which moves the cleaning mechanism along the electrode.

20. (New) The charger according to claim 19, wherein the electrode is a sheet-shaped electric conductor having a first plane including a straight line in an axial direction of the image carrier.

21. (New) The charger according to claim 20, wherein the electrode cleaning mechanism comprises a sheet section having a second plane arranged perpendicularly to the first plane of the electrode, and a holding member for holding the sheet section along an axial direction of the image carrier.

22. (New) The charger according to claim 19, wherein the electrode cleaning mechanism cleans the tips of the charging needles by one or more of vibration of or impact on the charging needles by contacting the charging needles with the sheet section which moves in a non-rolling fashion against the charging needles.

23. (New) The charger according to claim 19, wherein the sheet section comprises a film-like elastic sheet comprising one of polyester, polyimide and polyamide.

24. (New) The charger according to claim 19, wherein the sheet section has a thickness of 10 to 100 μm .

25. (New) The charger according to claim 19, wherein the sheet section has a thickness of 25 to 75 μm .

26. (New) The charger according to claim 19, wherein an encroaching amount of the sheet section on the electrode is 0.1 to 1.5 mm.

27. (New) The charger according to claim 19, wherein an abrasive is applied to a surface of the sheet section.

28. (New) The charger according to claim 19, further comprising a holding plate capable of retaining the deposits removed from the electrode by the electrode cleaning mechanism.

29. (New) The charger according to claim 19, wherein
the second plane of the sheet section is vertical to the first plane, and deforms within a range of -90° to 90° with respect to a virtual line vertical to an axis of the image carrier.

30. (New) An image forming apparatus comprising:
an image carrier which holds a latent image and a developer image;
a charger comprising an electrode, an electrode cleaning mechanism and a moving mechanism, the electrode comprising a plurality of charging needles and giving a predetermined charge to an image carrier, the electrode cleaning mechanism comprising a sheet section contacting tips of the charging needles, the moving mechanism moving the electrode cleaning mechanism along the electrode;
a development device which supplies a developer to the image carrier to which the predetermined potential is supplied by the charger;
and a transfer device which transfers the developer image formed on the image carrier onto an output medium.

31. (New) The image forming apparatus according to claim 30, wherein the moving mechanism comprises a driving means, and operates the driving means when the number of output media becomes a predetermined number or more.

32. (New) The image forming apparatus according to claim 30, wherein the driving means is not operated while an image is being formed.

33. (New) The image forming apparatus according to claim 30, wherein the moving mechanism comprises the driving means, and operates the driving means with an instruction from a control panel.

34. (New) The image forming apparatus according to claim 33, wherein the moving mechanism further comprises electrode cleaning mechanism position detecting

sensors that determine whether to move the electrode cleaning mechanism in a given direction by detecting whether the electrode cleaning mechanism has been moved from end to end in the longitudinal direction of the electrode and sending the determination to a printer CPU.

35. (New) The image forming apparatus according to claim 30, wherein the sheet section changes in shape based on predetermined stress.

36. (New) The image forming apparatus according to claim 30, wherein the sheet section is a film-like elastic sheet comprising one of polyester, polyimide and polyamide.

37. (New) The image forming apparatus according to claim 30, wherein an abrasive is applied to a surface of the sheet section.

38. (New) The image forming apparatus according to claim 30, further comprising a holding plate capable of retaining the deposits removed from the electrode by the electrode cleaning mechanism.